IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Withdrawn): Plant protein with repeated WD40 motifs, characterized in that it belongs to the FZR subfamily.

Claim 2 (Withdrawn): Protein according to Claim 1, characterized in that it exhibits at least 45%, and preferably at least 55%, identity with the polypeptide having the sequence SEQ ID No. 2 or at least 60% and preferably at least 70% similarity with the polypeptide having the sequence SEQ ID No. 2.

Claims 3-7 (Canceled).

Claim 8 (Withdrawn): A method for regulating the differentiation and the proliferation of plant cells comprising administering the nucleic acid of Claim 1.

Claim 9 (Withdrawn): The method of Claim 8, wherein said nucleic acid sequence promotes endoploidy in the cells of a plant or of a plant tissue.

Claim 10 (Withdrawn): The method of Claim 8, wherein said nucleic acid sequence promotes the *in vitro* regeneration of plants from calli in culture.

Claim 11 (Withdrawn): A method for regulating the differentiation and the proliferation of plant cells, wherein said nucleic acid encodes all or part of a protein of the FZR subfamily, or its complementary sequence.

Claim 12 (Currently Amended): An isolated or purified nucleic acid comprising:

(a) a polynucleotide sequence encoding the polypeptide of SEQ ID NO: 2, or ~~SEQ ID NO: 1, or a fragment thereof that encodes the full-length polypeptide CCS52Ms (SEQ ID NO: 2), or~~

(b) a sequence that hybridizes under stringent conditions to the full-length complement of the coding portion of SEQ ID NO: 1 wherein the coding portion of SEQ ID NO: 1 encodes the full-length CCS52Ms polypeptide of ~~(~~SEQ ID NO: 2~~)~~, and that encodes a polypeptide that comprises WD-40 repeats and that inhibits mitosis and induces endoreplication, wherein stringent conditions in (b) comprise washing in 0.5X SSC at 65 °C~~;~~ ~~and~~

~~wherein CCS52Ms is a polypeptide having 475 amino acids of *Medicago sativa*~~.

Claim 13 (Currently Amended): The nucleic acid of Claim 12 which comprises a polynucleotide sequence encoding the polypeptide of SEQ ID NO: 2 ~~that comprises SEQ ID NO: 1 or a fragment thereof~~.

Claim 14 (Currently Amended): The nucleic acid of Claim 12 that comprises polynucleotides 182 to 1609 of SEQ ID NO: 1 ~~hybridizes to the complement of SEQ ID NO: 1 under stringent conditions~~.

Claim 15 (Currently Amended): The nucleic acid of Claim 12, which comprises a sequence that hybridizes under stringent conditions to the full-length complement of the coding portion of SEQ ID NO: 1 wherein the coding portion of SEQ ID NO: 1 encodes the full-length CCS52Ms polypeptide of ~~(~~SEQ ID NO: 2~~)~~, and that encodes a polypeptide that comprises WD-40 repeats and that inhibits mitosis and induces endoreplication, wherein stringent conditions in (b) comprise washing in 0.5X SSC at 65 °C ~~encodes the polypeptide of SEQ ID NO: 2 or a fragment of SEQ ID NO: 2 which comprises WD-40 repeats~~.

Claim 16 (Cancelled)

Claim 17 (Currently Amended): The nucleic acid of Claim 12 that encodes the CCS52Ms protein of SEQ ID NO: 2.

Claim 18 (Cancelled)

Claim 19 (Currently Amended): The nucleic acid of Claim 12 that encodes a polypeptide identical to SEQ ID NO: 2, except that residue 16 is G and residue 141 is I ~~the CCS52Mt protein, wherein CCS52Mt is a polypeptide having 475 amino acids of *Medicago truncatula*~~.

Claim 20 (Previously Presented): The nucleic acid of Claim 12 that is isolated from a plant.

Claim 21 (Previously Presented): A vector comprising the nucleic acid of Claim 12.

Claim 22 (Previously Presented): The vector of Claim 21, wherein said nucleic acid is placed under the control of a promoter.

Claim 23 (Previously Presented): The vector of Claim 22, wherein said promoter is an inducible promoter, a constitutive promoter, a tissue-specific promoter or an ubiquitous promoter.

Claim 24 (Previously Presented): The vector of Claim 22, wherein said promoter is an inducible promoter.

Claim 25 (Previously Presented): The vector of Claim 22, wherein said promoter is a tissue specific promoter.

Claim 26 (Previously Presented): A host cell comprising the nucleic acid of Claim 12.

Claim 27 (Previously Presented): A plant cell that comprises the nucleic acid of Claim 12.

Claim 28 (Previously Presented): A transgenic plant comprising the nucleic acid of Claim 12.

Claim 29 (Cancelled)

Claim 30 (Currently Amended): A nucleic acid that hybridizes to SEQ ID NO: 1 under stringent conditions, wherein stringent conditions comprise washing in 0.5X SSC at 65°C, and which inhibits the expression of the polypeptide of SEQ ID NO: 2, which is selected from the group consisting of the full complement of SEQ ID NO: 1, the full complement of the coding portion of SEQ ID NO: 1, and an antisense sequence consisting of the 1.2 kb *SstI-PvuII* fragment of SEQ ID NO: 1 when placed in the antisense orientation under the control of a promoter.

Claim 31 (Cancelled)

Claim 32 (Previously Presented): A vector comprising the nucleic acid of Claim 30.

Claim 33 (Previously Presented): The vector of Claim 32, wherein said nucleic acid is placed under the control of a promoter.

Claim 34 (Previously Presented): The vector of Claim 32, wherein said promoter is an inducible promoter, a constitutive promoter, a tissue-specific promoter or an ubiquitous promoter.

Claim 35 (Previously Presented): The vector of Claim 32, wherein said promoter is an inducible promoter.

Claim 36 (Previously Presented): The vector of Claim 32, wherein said promoter is a tissue specific promoter.

Claim 37 (Previously Presented): A host cell comprising the nucleic acid of Claim 32.

Claim 38 (Previously Presented): A plant cell that comprises the nucleic acid of Claim 32.

Claim 39 (Previously Presented): A transgenic plant comprising the nucleic acid of Claim 32.

Claim 40 (Previously Presented): The nucleic acid of Claim 12, wherein said sequence encodes a protein comprising amino acid residues 51-55 and 57 of SEQ ID NO: 2.

Claim 41 (Previously Presented): The nucleic acid of Claim 12, wherein said sequence encodes a protein comprising amino acid residues 81, 84, 85, 90 and 91 of SEQ ID NO: 2.